

Please add the following paragraph after the second full paragraph on page 13 in the DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS section:

AB
"As shown in Figure 2, a bi-polar assembly 200 can be formed by attaching two perforated isolating frames 20 to both sides of a single conductive polymer bi-polar current collector 29. On the top and bottom sides of the bi-polar assembly 200, the same carbon-based electrode paste 26 may be placed within the openings 22 to form electrode plates 28, similar to the electrode plates of the single pole assembly 100 as displayed in Figure 1."

IN THE DRAWINGS:

Please enter corrected Figure 2, to more clearly indicate the bi-polar current collector with reference number 29. With such amendment, no new matter is added. In accordance with the rules, a replacement drawing and a marked-up version are included as Appendix B.

RESPONSE

SUMMARY:

The subject application sets forth original claims 1-59, of which claims 1, 21, and 41 are independent claims. Claims 1-59 stand collectively rejected under 35 U.S.C. 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1-40 stand collectively rejected under 35 U.S.C. 112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the

applicant regards as the invention. Responses to the rejections summarized above, including traversals of each rejection, are hereafter presented with respect to each individual argument presented by the Examiner.

REJECTION OF ORIGINAL CLAIMS 1-59 (35 U.S.C. §112, first paragraph):

Original claims 1-59 stand collectively rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In view of the remarks presented hereafter, Applicants respectfully traverse such allegation of inadequate specification support.

The description of the bi-polar assembly 200 as shown in Figure 2 is amended herewith without entry of new matter. A revised Figure 2 is also submitted herewith without entry of new matter. Such revised Figure 2 provides an appropriate label (reference number 29) for the bi-polar current collector in bi-polar assembly 200. The additional paragraph presently added on page 13 of the DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS section of the subject application and the presently amended Figure 2 are supported by language in the third full paragraph on page 6 in the SUMMARY OF THE INVENTION section of the original application.

The above amendments should clarify the questions set forth by the Examiner on numbered page 2 of the 07/15/2002 office action as well as any other questions regarding bi-polar assembly 200. The thick black line on the right side of assembly 200 as seen in Figure 2 is thus the bi-polar current collector 29. The electrode plates 28 of the bi-polar assembly 200 are indeed respective plates within an opening of respective frames 20, and

there is another electrode plate located within the bottom frame 20 of bi-polar assembly 200. The bi-polar current collectors referred to in independent claims 1, 21 and 41 are thus referring to bi-polar current collectors 29 as opposed to bi-polar assembly 200.

Applicants respectfully submit that sufficient clarification to the present application is presently provided, and without inclusion of any new matter, such that claims 1-59 are in condition for examination on the merits.

REJECTION OF ORIGINAL CLAIMS 1-40 (35 U.S.C. §112, second paragraph):

Original claims 1-40 stand collectively rejected under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In view of the remarks presented hereafter, Applicants respectfully traverse such allegation of inadequate specification support.

The subject application includes language that specifically describes "a plurality of bi-polar current collectors". The third full paragraph on page 6 of the original application sets forth that a bi-polar current collector (such as 29) is intended for use internal to a stack of series bi-polar connected cells. Continuing to the last paragraph on page 6, "a capacitor device may be formed by stacking successive layers of a bi-polar current collector and electrodes," thus stacking together a plurality of bi-polar assemblies 200. Although only one bi-polar assembly 200 is depicted in the exploded stack of Figure 2, multiple bi-polar assemblies may be stacked with "the electrodes [are] ... separated by proton conductive polymer membranes." By successively stacking a plurality of bipolar assemblies, a plurality of bi-polar current collectors are thus provided in a single capacitive assembly.

Additional support for a "plurality of bi-polar current collectors" may be found in the first full paragraph on page 7 of the SUMMARY OF THE INVENTION section and in the second full paragraph on page 14 of the DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS section, where it is stated that internal cells may be connected in series or that two or more bi-polar assemblies be combined in parallel, such as depicted in the tongue design of Figure 3B. This method increases capacity and decreases internal resistance. By combining two or more bi-polar assemblies in parallel, there is also "a plurality of bi-polar current collectors" present.

Applicants respectfully submit that sufficient clarification to the present application is presently provided, without entry of any new matter, and that claims 1-40 are in condition for examination on the merits.

UPDATED APPLICATION STATUS:

Per the Examiner's request, the present amendments to the specification include proper identification in first full paragraph on page 10 in the DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS section of the updated serial number and filing date of the referenced application.

CONCLUSION:

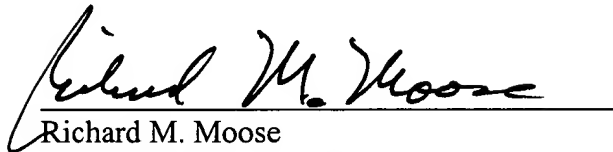
Inasmuch as all outstanding issues have been addressed it is respectfully submitted that the present application, including claims 1-59, is in complete condition for examination on the merits and subsequent issuance of a formal Notice of Allowance, and action to such effect is earnestly solicited. The Examiner is invited to telephone the undersigned at his convenience should only minor issues remain after consideration of this Amendment and Response in order to permit early resolution of the same.

Respectfully submitted,

DORITY & MANNING,
ATTORNEYS AT LAW, P.A.

October 15, 2002

Date

A handwritten signature in cursive script, reading "Richard M. Moose", is written over a horizontal line.

Richard M. Moose
Registration No. 31, 226

P.O. Box 1449
Greenville, South Carolina 29602-1449

TELEPHONE: (864) 271-1592

FACSIMILE: (864) 233-7342